



1971

OPERATING
SUMMARY

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W384
1971
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EGANVILLE

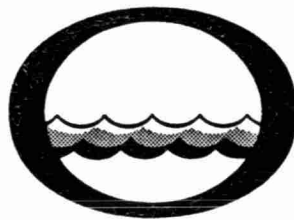
WATER SUPPLY SYSTEM

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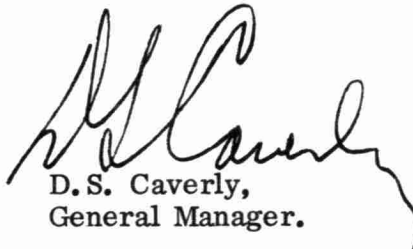


Water management in Ontario


Ontario
Water Resources
Commission

We are pleased to submit for your consideration a summary of operating during 1971 of the water supply system serving your community.

This operating summary contains parameters normally used to measure plant performance and to forecast demands for increased service, as well as relevant cost data. It is our objective to provide an adequate supply of safe and attractive water.



D.S. Caverly,
General Manager.



D.A. McTavish, P. Eng.,
Director,
Division of Plant Operations.

TD 227

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EGANVILLE

WATER SUPPLY SYSTEM

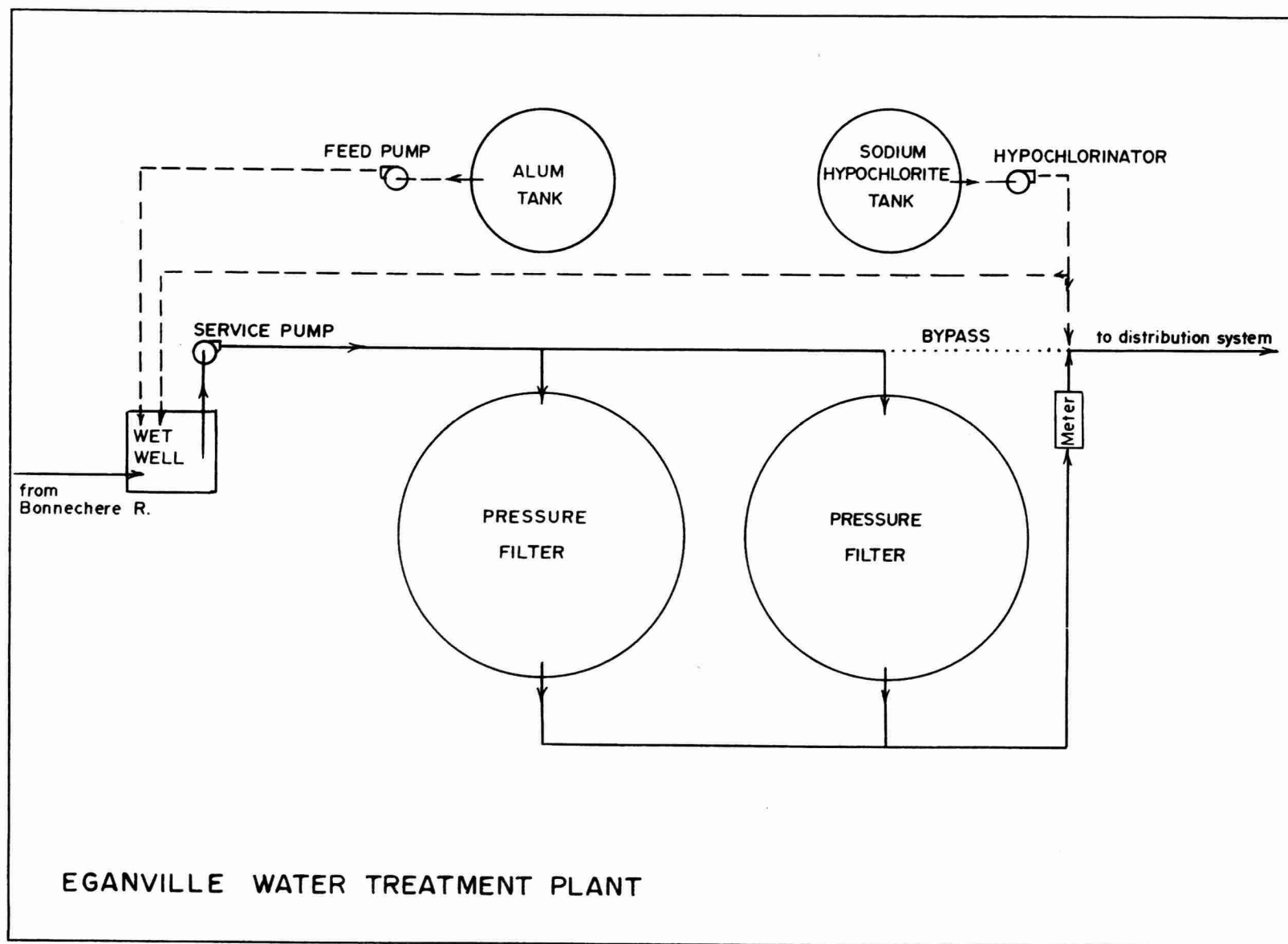
1971 ANNUAL OPERATING SUMMARY



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CONTENTS

Title Page	1
Flow Diagram	4
Design Data	5
'71 Review	6
Project Costs	7
Process Data	9



DESIGN DATA

PROJECT NO. 6-0093-61

TREATMENT Coagulation and Filtration

FILTERS

Type: Gravity Tanks
Size: 84 inch dia

SOURCE

- Bonnechere River

DISTRIBUTION

6" and 8" dia pipe

PUMP

One Canada Pump 167 igpm @ 210' TDH

'71 Review

GENERAL

This project consists of a water treatment plant employing coagulation, mixing, pressure filters, high lift pumping and a water distribution system.

FLOWS

A total flow of 28.438 million gallons was recorded at the water treatment plant in 1971. The average daily flow in 1971 was 0.078 million gallons.

EXPENDITURES

The total operating cost for the water system was \$2,568.38. The cost of treating and supplying water was \$90.31 per million gallons.

CONCLUSIONS

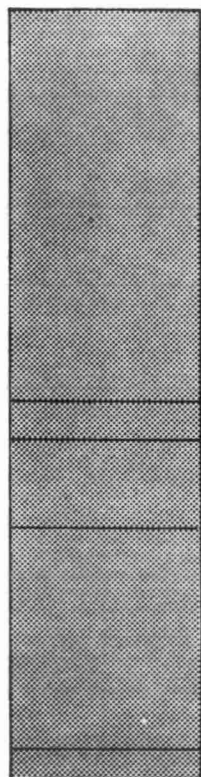
Final plans and specifications for the construction of an elevated tank are being prepared by R. V. Anderson and Associates Limited. Once completed, it is expected that this extra storage will increase fire protection, reduce the peak flows from the pumping station and simplify the maintenance and operation of the treatment facilities.

PROJECT COSTS

6-0093-61	
NET CAPITAL COST (Final)	\$171, 696.31
DEDUCT - Portion financed by CMHC/MDLB (Final)	<u>151, 426.19</u>
Long Term Debt to OWRC	\$ <u>20, 270.12</u>
Debt Retirement Balance at Credit (Sinking Fund) December 31, 1971	\$ <u>3, 682.21</u>
Net Operating	\$ 2, 568.38
Debt Retirement	221.00
Reserve	725.76
Interest Charged	<u>1, 136.97</u>
TOTAL	\$ <u>4, 652.11</u>

RESERVE ACCOUNT

Balance @ January 1, 1971	\$ 3, 822.78
Deposited by Municipality	725.76
Interest Earned	<u>265.31</u>
	\$ 4, 813.85
Less Expenditures	<u>-</u>
Balance @ December 31, 1971	\$ <u>4, 813.85</u>



OPERATING COSTS

● PAYROLL	%
● FUEL	%
● POWER	%
● CHEMICALS	50 %
● GENERAL SUPPLIES	5 %
● EQUIPMENT	12 %
● REPAIRS & MAINTENANCE	29 %
● SUNDRY	4 %
● WATER	%
● TRAVEL	%

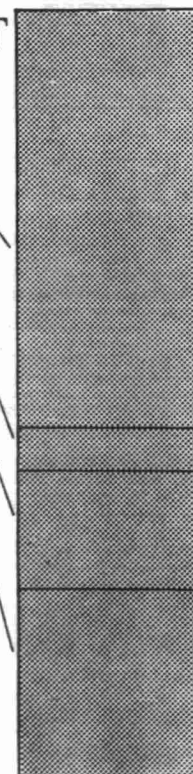
1971 COSTS

TOTAL ANNUAL COST

NET OPERATING	55 %
DEBT RETIREMENT	5 %
RESERVE	16 %
INTEREST	24 %

YEARLY OPERATING COSTS

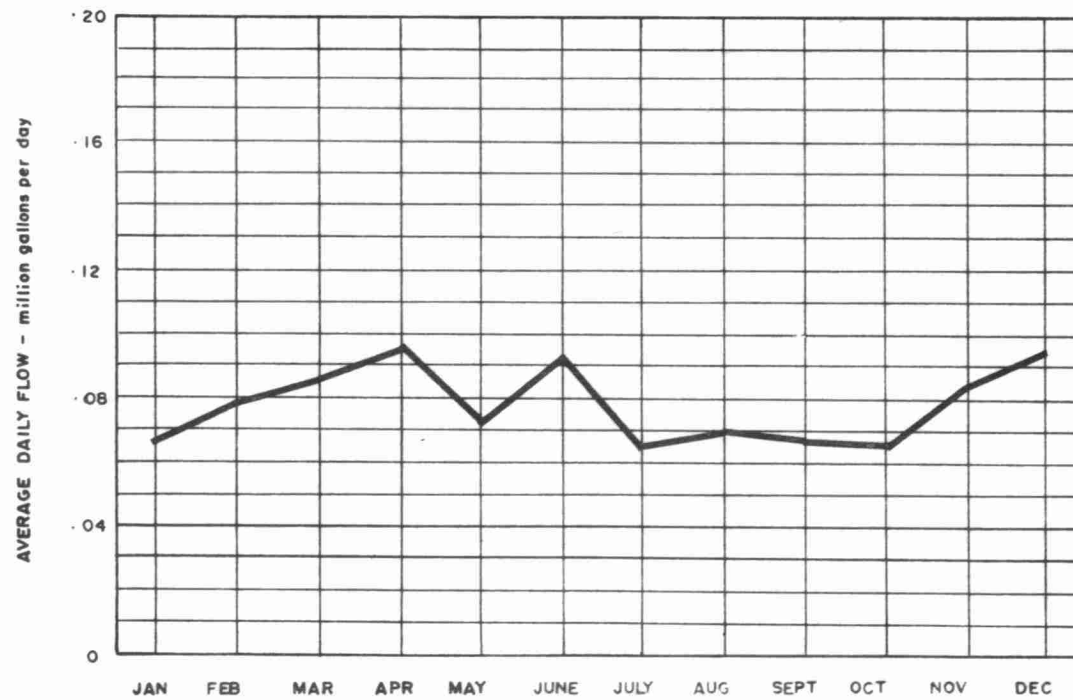
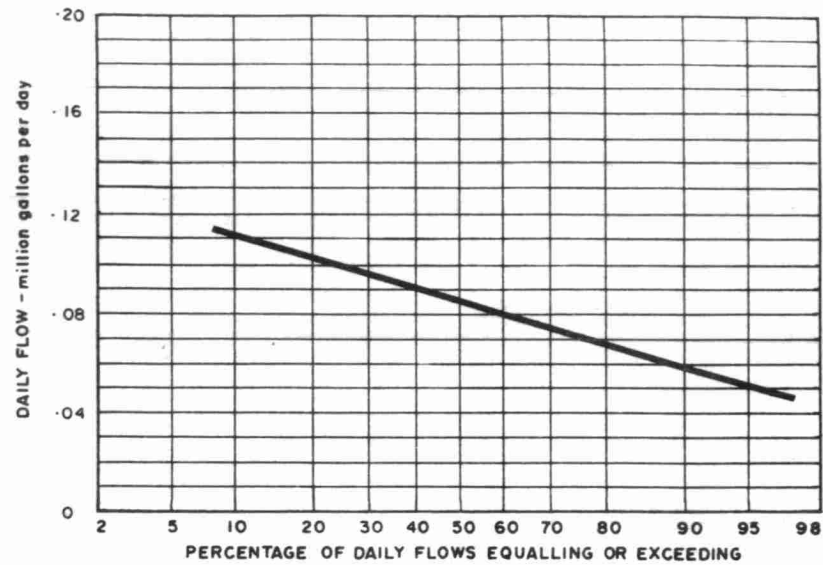
YEAR	WATER TREATED in million gallons	TOTAL OPERATING COSTS	TREATMENT COSTS
			cents per thousand gal.
1971	28.4	\$2,568.38	9.0 cents





PROCESS DATA

FLOWS



DESIGN CAPACITY 0.25

PLANT PERFORMANCE

MONTH	FLOWS			ALUM		CHLORINE		BACTERIAL SAMPLING					
	TOTAL PLANT OUTPUT million gallons	AVERAGE DAILY FLOW million gallons	MAXIMUM DAY'S FLOW million gallons	QUANTITY USED LB	AVG DOSAGE mg/l	SODIUM HYPO- CHLORITE GAL	AVG DOSAGE mg/l	R A W				TREATED	
								NO OF SAMPLES WITH TOTAL COLI PER 100 ML OF				NUMBER OF SAMPLES TAKEN	NUMBER HAVING COLIFORM ORGANISMS
								0	1-3	4-32	33-320		
JAN	2.067	.069	.114	407	19.7	46	2.2	-	-	-	-	-	-
FEB	2.250	.080	.108	364	16.2	35	1.6	-	-	-	-	-	-
MAR	2.680	.086	.119	311	11.6	54	2.0	3	-	-	-	15	-
APR	2.856	.095	.153	236	8.3	65	2.3	3	-	-	-	12	-
MAY	2.196	.071	.128	384	17.5	58	2.6	3	-	-	-	13	-
JUNE	2.599	.090	.145	259	10.0	60	2.3	4	-	1	1	26	1
JULY	2.051	.066	.095	246	12.0	65	3.2	2	-	-	1	12	-
AUG	2.155	.070	.129	256	11.9	57	2.6	3	-	1	-	16	-
SEPT	2.010	.067	.089	223	11.1	53	2.6	4	1	1	1	25	-
OCT	2.074	.067	.079	182	8.8	44	2.1	4	-	-	-	14	-
NOV	2.557	.085	.119	306	12.0	65	2.5	2	-	1	-	16	1
DEC	2.943	.095	.105	304	10.3	69	2.3	1	-	1	-	13	-
TOTAL	28.438	-	-	3577	-	671	-	29	1	5	3	162	2
AVG.	-	.078	MAXIMUM .153	298	12.6	56	2.4	2 GEOMETRIC MEAN				-	-

WATER QUALITY

PROPERTY	RAW WATER				TREATED WATER				DESIRABLE STANDARDS
	NUMBER OF SAMPLES	AVERAGE	MAXIMUM	MINIMUM	NUMBER OF SAMPLES	AVERAGE	MAXIMUM	MINIMUM	
HARDNESS in mg/l as CaCO_3	9	57	78	44	1	44	-	-	80 - 100
ALKALINITY in mg/l as CaCO_3	9	44	62	31	1	28	-	-	30 - 100
IRON in mg/l Fe	9	22	1.00	.05	1	.10	-	-	Less than 0.3
CHLORIDE in mg/l Cl^-	9	7	16	2	1	5	-	-	Less than 250
pH in pH units	9	7.7	7.9	7.1	1	7.6	-	-	7.0 - 8.5

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